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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/824,724	04/04/2001	Alex Horng	HORN3002/EM/6663	1746

7590 01/30/2002
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EXAMINER

LE, DANG D

ART UNIT PAPER NUMBER

2834

DATE MAILED: 01/30/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/824,724

Applicant(s)

HORNG ET AL.

Examiner

Dang D Le

Art Unit

2834

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 04 April 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) ____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Claim Objections

1. Claim 8 is objected to because of the following informalities: claim 8, lines 2 and 3, delete "typed". Appropriate correction is required.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-6 are rejected under 35 U.S.C. 102(b) as being anticipated by Watanabe et al.

Regarding claim 1, Watanabe et al. show a double sensing face motor structure (Figure 10) comprising:

- A base board (3), defining an axial hole (for bearing box 4), a plurality of coils (S1-S3) mounted around a periphery of the axial hole in an equally spaced annular manner (Figure 2), a sensor member (PS1-PS3) mounted on the base board;
- Two rotors (8, 12), respectively located on an upper side and a lower side of the base board to integrally combine with each other, each of the two rotors provides, with a permanent magnet (M1-M4 and N1-N4) respectively mating with the coils of the base board; and

- A central shaft (7), combined to a center of each of the two rotors, and rotatably mounted in the axial hole of the base board in a positioning manner (Figure 10).

Regarding claim 2, it is noted that Watanabe et al. also show the base board (3) being provided with a plurality of breaches (Figure 10) for receiving the plurality of coils.

Regarding claim 3, it is noted that Watanabe et al. also show the center of at least one rotor (8) being provided with a central seat (top portion) for allowing tight insertion of the central shaft (at 6).

Regarding claim 4, it is noted that Watanabe et al. also show a shaft seat (4) secured on the axial hole of the base board, the shaft seat provided with a bearing (5) for rotatably receiving the central shaft.

Regarding claim 5, it is noted that Watanabe et al. also show the central shaft (7) having one end (top portion) integrally formed with the two rotors.

Regarding claim 6, it is noted that Watanabe et al. also show the two rotors (8, 12) being combined with each other by the central shaft (7, Figure 10).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Watanabe et al. in view of Shiraki et al.

Regarding claim 7, Watanabe et al. show all of the limitations of the claimed invention except for at least one rotor being provided with blades.

Shiraki et al. show at least one rotor being provided with blades (30) for the purpose of making a fan.

Since Watanabe et al. and Shiraki et al. are all from the same field of endeavor; the purpose disclosed by one inventor would have been recognized in the pertinent art of the others.

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to provide at least one rotor with blades as taught by Shiraki et al. for the purpose discussed above.

6. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Watanabe et al. in view of Lukens.

Regarding claim 8, Watanabe et al. show all of the limitations of the claimed invention except for one rotor being provided with blast typed blades, and the other rotor being provided with axial flow typed blades.

Lukens shows the rotor being provided with blast typed blades (27) and axial flow typed blades (14) for the purpose of reducing heat.

Since Watanabe et al. and Lukens are all from the same field of endeavor; the purpose disclosed by one inventor would have been recognized in the pertinent art of the others.

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to provide one rotor with blast typed blades, and the other rotor with axial flow typed blades as taught by Lukens for the purpose discussed above.

7. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Watanabe et al. in view of Baines.

Regarding claim 9, Watanabe et al. show all of the limitations of the claimed invention except for the sensor member being mounted at a corner position of the coil.

Baines shows the sensor member (16) being mounted at a corner position of the coil (13) for the purpose of monitoring the motor operation.

Since Watanabe et al. and Baines are all from the same field of endeavor; the purpose disclosed by one inventor would have been recognized in the pertinent art of the others.

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to mount the sensor member at a corner position of the coil as taught by Baines for the purpose discussed above.

8. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Watanabe et al. in view of Williams.

Regarding claim 10, Watanabe et al. show all of the limitations of the claimed invention except for a start member mounted on the base board.

Williams shows a start member (starting switch 19) mounted on the base board (31) for the purpose of starting the motor.

Since Watanabe et al. and Williams are all from the same field of endeavor; the purpose disclosed by one inventor would have been recognized in the pertinent art of the others.

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to mount a start member on the base board as taught by Williams for the purpose discussed above.

Information on How to Contact USPTO

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dang D Le whose telephone number is (703) 305-0156. The examiner can normally be reached on Monday through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nestor Ramirez can be reached on (703) 308-1371. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 305-3431 for regular communications and (703) 305-3431 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1782.

DDL
January 26, 2002

DL

Dang D. Le